

Claims:

1. A cleaning device for a hair removing apparatus, said device comprising:  
a housing being configured to hold said hair removing apparatus;  
a basin provided in said housing for accommodating therein an operator head of said apparatus;  
a tank containing a volume of a cleaning liquid;  
a supplying means that supplies the cleaning liquid from said tank to said basin for cleaning the operator head;  
said tank having an inlet and an outlet, said inlet communicating with said basin by way of a fluid intake channel which opens to the atmosphere to permit the entry of an outside air, and said outlet communicating with a liquid supply channel for dispensing the liquid to said basin  
said supplying means including a pump disposed in one of said fluid intake channel and said liquid supply channel in order to draw said cleaning liquid from the basin and the air into said tank as well as to supply the cleaning liquid from said tank to said basin,  
wherein said tank is in the form of a hermetically sealed container which is selectively open to the atmosphere by way of an air valve,  
said device including a controller which selectively gives a supply mode for supplying the liquid to said basin from said tank and a recovery mode for recovering the liquid from said basin to said tank, and  
said controller controlling to open and close said air valve while actuating said pump, thereby enabling one of said supply mode and said recovery mode, selectively.

2. The cleaning device as set forth in claim 1, wherein said pump is disposed in said fluid intake channel, and said supply mode being defined to actuate said pump while keeping said air valve closed so as to feed the air through said fluid intake channel into said tank and accumulate the air pressure within said tank, thereby forcing the liquid out of said tank to said basin, said recovery mode being defined to actuate said pump while keeping said air valve opened to feed the liquid out from said basin through said fluid intake channel to said tank without accumulating the air pressure within said tank, thereby collecting the liquid into the tank.

3. The cleaning device as set forth in claim 2, wherein said air valve is an electromagnetic valve that closes and opens selectively under the control of said controller.

4. The clearing device as set forth in claim 2, further including a drip pan disposed immediately below said basin to receive the liquid dripping from said basin, said drip pan being open to the atmosphere and being connected to said fluid intake channel such that the cleaning liquid and/or the air is drawn into the tank through said fluid intake channel.

5. The cleaning device as set forth in claim 4, wherein said basin is formed in its bottom with a drain port through which said liquid dribbles into said drip pan together with contaminants dislodged from said operator head, said drip pan being provided with a filter which passes said liquid removed of said contaminants into said tank.

6. The clearing device as set forth in claim 5, wherein said drip pan is defined by a drawer removably received within a recess formed in said housing below said basin, said drawer having an opening in fluid communication with said drain port and having a connection port for detachable connection with said fluid intake channel, said filter being fixed to said drawer at a position between the opening and said connection port.

7. The cleaning device as set forth in claim 2, wherein said tank is detachably mounted on said housing.

8. The cleaning device as set forth in claim 7, wherein said air valve is mounted in said housing and communicates with said tank through an air exhaust channel,

said housing incorporating said fluid intake channel, said air exhaust channel, and a liquid supply channel leading to said basin, said tank having being integrally formed with an air exhaust tube for detachable connection with said air exhaust channel, a liquid outlet tube extending from said tank for detachable connection with said liquid supply channel, and a fluid inlet tube extending from said tank for detachable connection with said fluid intake channel.

9. The clearing device as set forth in claim 8, wherein said housing includes a stand having a mounting face on which said tank is attached, said mounting face being formed at the top end of said housing and including sockets for detachable connection respectively with said air exhaust tube, said liquid outlet tube, and said fluid inlet tube, said sockets being oriented upwardly with respect to a height axis of said housing such that said tank is mounted on said stand from the above.

10. The cleaning device as set forth in claim 8, wherein said tank has in its top end a filling port sealed with a detachable cap.

11. The cleaning device as set forth in claim 2, wherein

said housing is provided with electrical contact means for connection with an electric circuit of said hair removing apparatus,  
said electrical contact means being connected to said controller for transmitting a signal that energizes said hair removing apparatus under the control of said controller.

12. The clearing device as set forth in claim 11, wherein  
said housing includes a retainer that holds said apparatus,  
said electrical contact means comprises a plurality of contacts exposed on the exterior of the housing,  
said retainer being configured to apply a force of pressing said contacts against corresponding terminals formed on the exterior of said apparatus.

13. The cleaning device as set forth in claim 1, wherein  
said housing has a height axis defining therealong a height of said device, and  
said basin is provided at the lower end of said housing,  
said tank being provided on said housing at a location laterally spaced from said basin with respect to said height axis in such a relation that said tank overlaps with the hair removing apparatus caught by said housing along the height axis of said housing.

14. The cleaning device as set forth in claim 1, wherein

said housing has a height axis defining therealong a height of said device, said tank having a vertical section and a horizontal section, said vertical section being disposed at a location laterally spaced from said basin with respect to said height axis in such a relation that said tank overlaps with the hair removing apparatus caught by said housing along said height axis, and said horizontal section being disposed below said basin.

15. The cleaning device as set forth in claim 1, wherein said liquid supply channel is opened to the atmosphere, and said pump is disposed in said liquid supply channel, said air valve is disposed in an air exhaust channel leading from said tank and margining into said liquid supply channel at said pump, a liquid feed valve being disposed in said liquid supply channel between said pump and said tank and being controlled by said controller to open and close selectively in association with said air valve, said supply mode being defined to actuate said pump while keeping said air valve closed and said liquid feed valve opened, thereby drawing the liquid from the tank and supplying it into said basin, said recovery mode being defined to actuate said pump while keeping said air valve opened and said liquid feed valve closed, thereby vacuuming the tank to draw the liquid out from the basin into said tank without feeding the liquid out of the tank.